NW-E7/E10

SERVICE MANUAL

Ver 1.0 2001.10

AEP Model
UK Model
NW-E7/E10
E Model
NW-E7

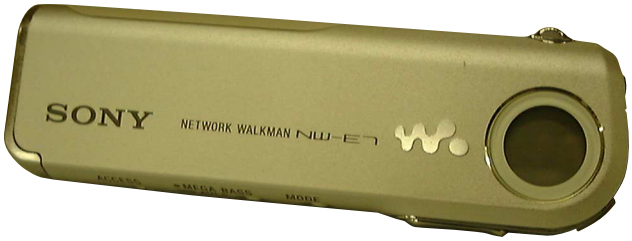

Photo : NW-E7

SPECIFICATIONS

Recording time
NW-E7: Approx. 60 min. (132kbps)
Approx. 80 min. (105kbps)
Approx. 120 min. (66kbps)
NW-E10: Approx. 120min. (132kbps)
Approx. 160 min. (105kbps)
Approx. 240 min. (66kbps)

Sampling frequency response
44.1kHz

Recording format
ATRAC3
MP3; Bit rate*: 32–256 kbps
Sampling rate: 32/44.1/48 kHz
* Variable bit rate files are not supported. Bit rate higher than 128 kbps is not guaranteed when you select the sampling rate 32 or 48 kHz.

Frequency response
20 to 20,000 Hz (single signal measurement)

Output
Earphone: stereo mini-jack

Signal-to-noise ratio (S/N)
More than 80dB (excluding 66 kbps)

Dynamic range
More than 85dB (excluding 66 kbps)

Operating temperature
5°C to 35°C (-41°F to 95°F)

Power source
• DC IN 1.2V (internal nickel metal hydride battery)
• DC IN 4.5V (supplied AC power adaptor)

Battery life
Approx. 11 hours

Dimensions (approx.)
27.8 × 92.4 × 13.3mm (1 1/8 × 3 3/4 × 17/32 inches) (w/h/d, projecting parts not included)
30.9 × 92.4 × 14.7mm (1 1/4 × 3 3/4 × 19/32 inches) (including projecting parts)

Mass (approx.)
55g (1.9 oz) (battery included)

Memory capacity
NW-E7: 64MB (including the system software)
NW-E10: 128MB (including the system software)

Supplied accessories
USB cradle (1)
Earphones (1)
USB cable (1)
AC power adaptor (for the supplied USB cradle) (1)
Carrying pouch (1)
CD-ROM (OpenMG Jukebox installation disc) (1)
NW-E7/E10 Operating Instructions (1)
OpenMG Jukebox Operating Instructions (1)

Design and specifications are subject to change without notice.

NETWORK WALKMAN

9-873-343-01
2001J0200-1
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Sony Corporation
Personal Audio Company
Service Manual Production Group

SONY®

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Flexible Circuit Board Repairing
- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement
- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

- Replacement of TMS320DA150GGU120 (IC601) used in the set requires a special tool.

SECTION 1
SERVICING NOTE

● UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead. (Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)

: LEAD FREE MARK

Unleaded solder has the following characteristics.
- Unleaded solder melts at a temperature about 40°C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350°C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

● USABLE FORMAT

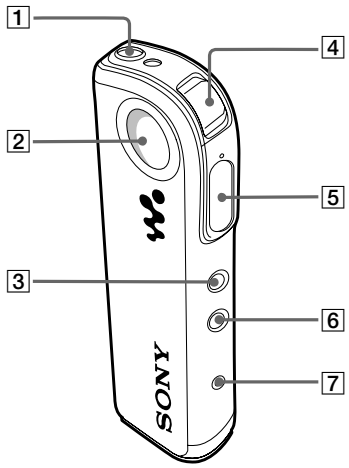
Use ISO9660 Level 1 format.

SECTION 2
GENERAL

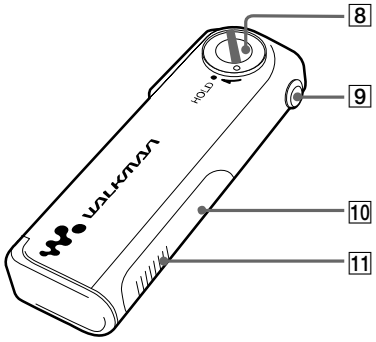
This section is extracted from instruction manual.

LOCATION AND FUNCTION OF CONTROLS

(front)



(rear)



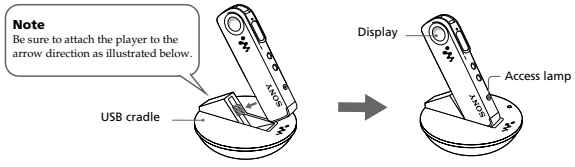
1 ∩ (Headphones/earphones) jack
2 Display
3 PLAY MODE button
4 Jog lever
5 VOLUME+/– button
6 MEGA BASS/AVLS button
7 Access lamp
8 HOLD switch
9 Strap hole for attaching the strap
10 Reset button
11 Connection part for the USB cradle

Transferring songs from the computer to Network Walkman (Check-out)

1 Install the supplied OpenMG Jukebox software and import digital audio files to OpenMG Jukebox.
For details, refer to the OpenMG Jukebox operating instructions.

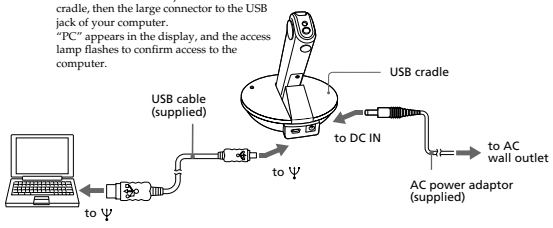
Note
Before connecting the player to your computer for the first time, be sure to install "OpenMG Jukebox" software and NW-E7/E10 driver from the supplied CD-ROM to your computer.
If you have already installed "OpenMG Jukebox" software, you also need to install NW-E7/E10 driver before connecting the player to your computer.

2 Connect Network Walkman to your computer.
①Attach your Network Walkman to the USB cradle.



② Connect the AC power adaptor*.
Connect the supplied AC power adaptor to an AC wall outlet first, then to the DC IN jack on the USB cradle.
* You can use the player by only connecting the dedicated USB cable, but the battery is not be charged.

③ Connect Network Walkman to your computer.
Connect the small connector of the supplied USB cable into the USB jack on the USB cradle, then the large connector to the USB jack of your computer.
"PC" appears in the display, and the access lamp flashes to confirm access to the computer.



Notes
- Do not disconnect the USB cable or remove the player from the USB cradle during the access lamp is flashing. This may cause the data being transferred to be broken.
- Do not connect more than two USB devices to your computer. Normal operation will not be guaranteed.
- Use of this player with a USB hub or a USB extension cable is not guaranteed.
- A malfunction may occur depending on the USB devices connected at any one time.
- When connecting Network Walkman to your computer for the first time, the USB driver Installer window appears. Please follow the instructions in the Installer window.
- You cannot operate the player while it is connected to a computer.
  If you place the player on the USB cradle connected to a computer during playback, playback stops and "PC" appears on the display.
- Even if you connect the player to a computer, it is impossible to browse the contents of the built-in memory of the player using the Windows Explorer.

3 Transfer the music file to Network Walkman (Check-out).
For details on how to operate, refer to the OpenMG Jukebox Operating Instructions.

Tip
To transfer the song back to the computer (check-in), refer to the OpenMG Jukebox software instruction manual or the online help.

Note on playing back time-limited music (timeout contents)

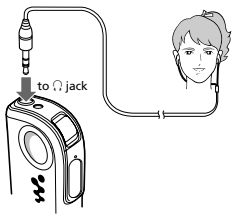
Some music data distributed via the Internet (EMD service) have playback time restriction.
When you playback a song with playback time restriction, the timeout icon (page 11) goes on.
If you try to playback a song whose playback period is already expired, the timeout icon flashes and playback of the next song begins.
We recommended you to check-in or delete the expired song in the player to the computer using the OpenMG Jukebox software.
OpenMG Jukebox will not playback the expired song and the expired song will not be available for check-out to Network Walkman. Delete these songs as needed.

Listening to music with Network Walkman

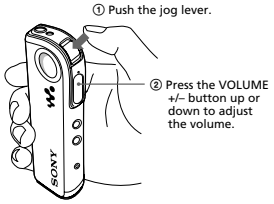
Please charge the battery before use (see page 7).

Note
When using Network Walkman, be sure to disconnect it from the computer.

1 Connect the headphones/earphones.



2 Start playback.

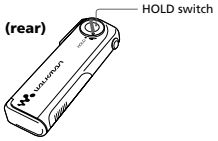


Playback stops automatically when the music reaches the end (only when the REPEAT mode is off).

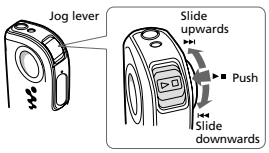
If playback does not start
The HOLD switch may be switched on. Please release it off (page 13).

To stop playback
Push the jog lever.

Tip
If you do not operate the player for 3 seconds while in stop mode, the display automatically turns off.



On other operations



To	Operation of the Jog lever
Go to the beginning of the next track	Slide upwards once.
Go to the beginning of the succeding tracks	Slide upwards and hold still.
Go to the beginning of the actual track	Slide downwards once.
Go to previous tracks	Slide downwards and hold still.
Go forward	While playback, slide up and hold still.
Go backward	While playback, slide down and hold still.

On the display

1 Play/Volume indicators
While playing, the ► icon and the song number appear.
While changing the volume, VOL and the volume level appear.

2 Play back mode indication (page 13)
The selected repeat mode is displayed.

3 MEGA BASS indication (page 12)
The indication lights up while the MEGA BASS function is activated.

4 AVLS indication (page 12)
The indication lights up while the AVLS function is activated.

5 Battery remain indication (page 7)
The remaining battery power is displayed.

6 Timeout icon
Depending on the time-limited rights associated with certain music content, the playback period may expire. (The icon appears when you play back a timeout content. The icon flashes if the playback period has expired.)

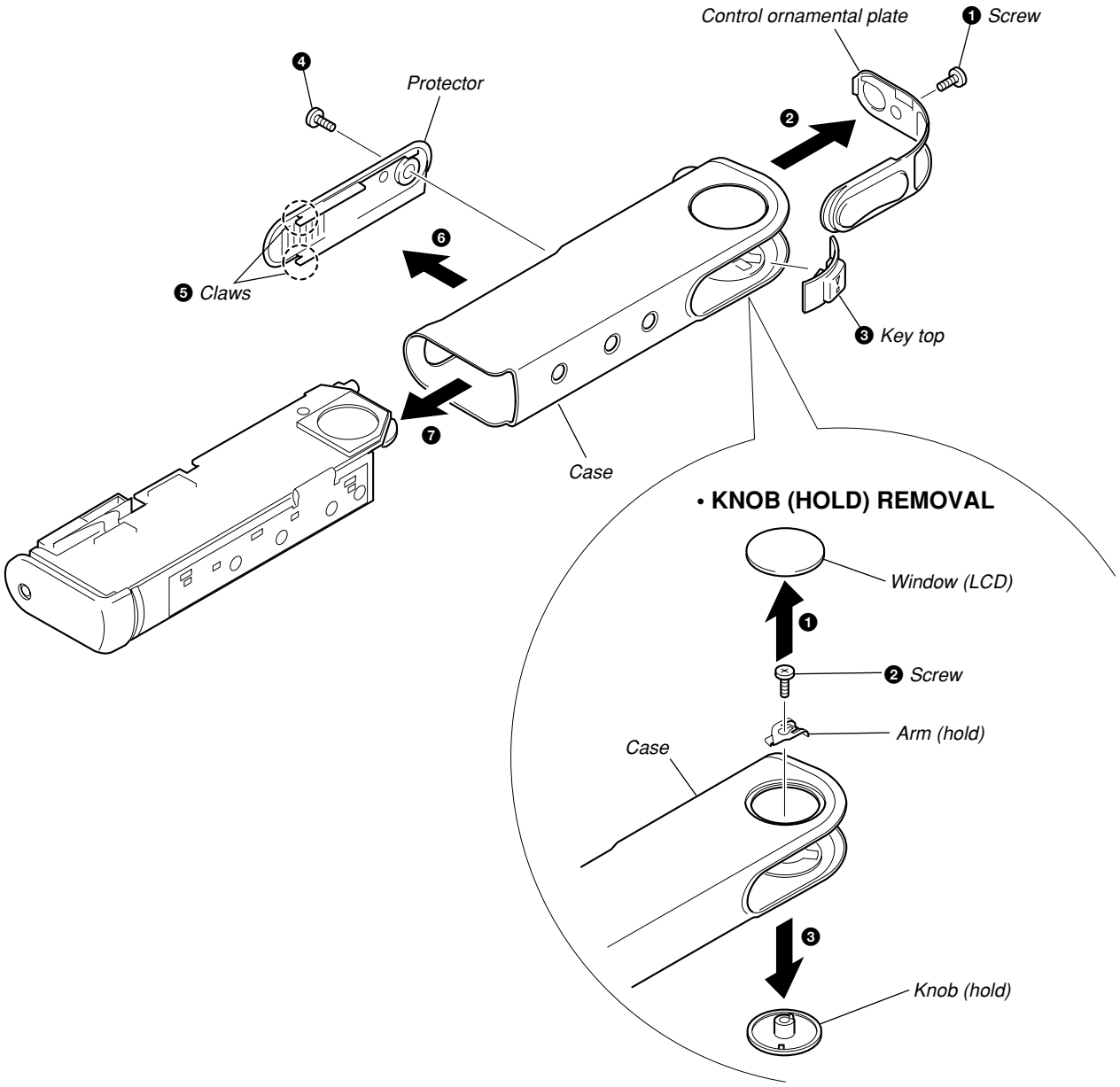
SECTION 3
DISASSEMBLY

● The equipment can be removed using the following procedure.

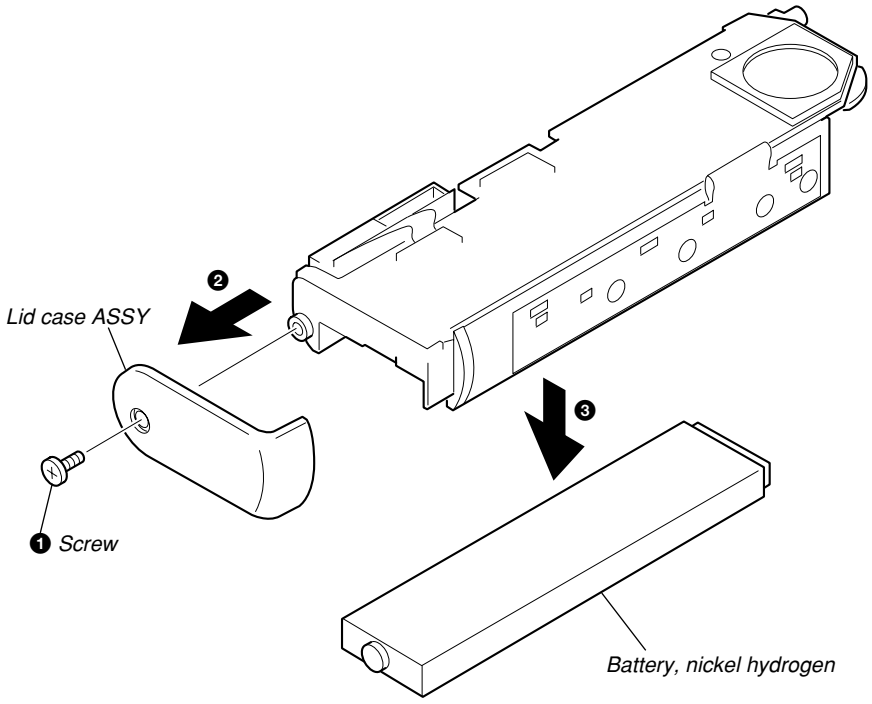
Set ➡ Case ➡ Battery, nickel hydrogen ➡ Main board

Note : Follow the disassembly procedure in the numerical order given.

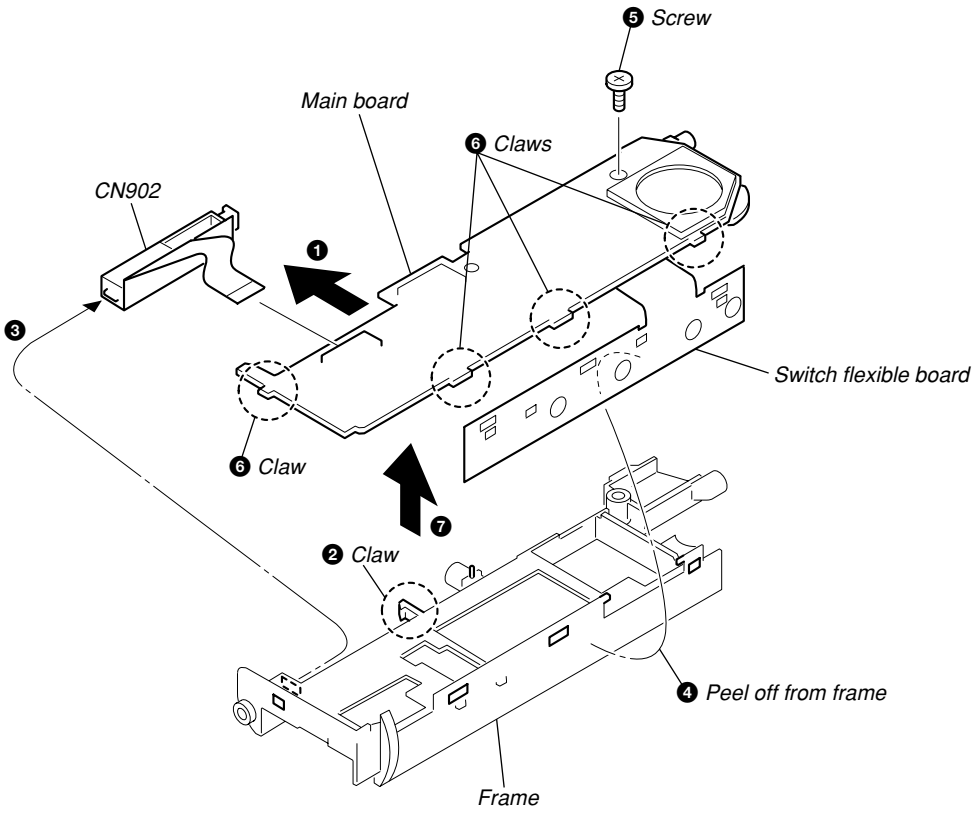
3-1. CASE



3-2. BATTERY, NICKEL HYDROGEN

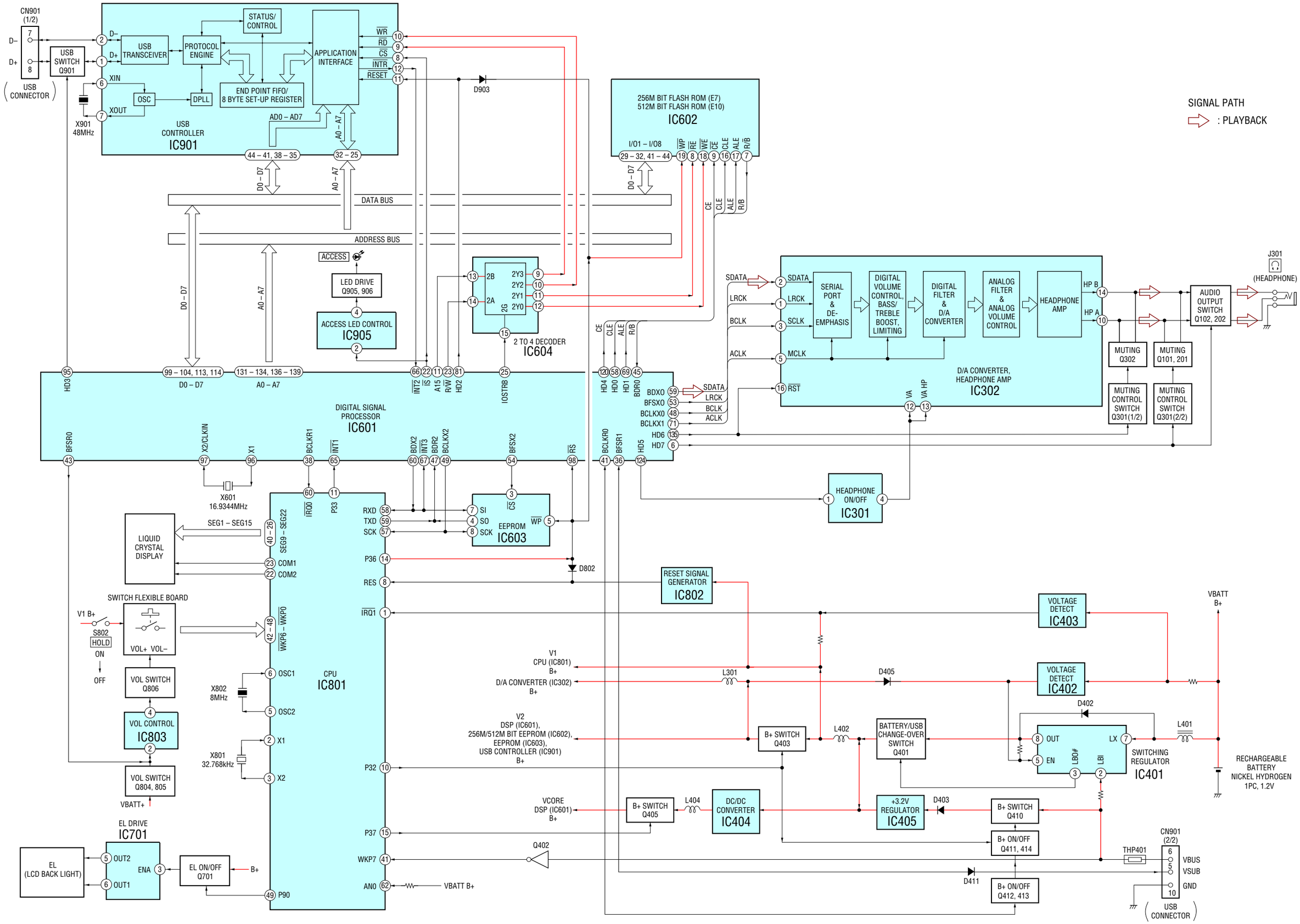


3-3. MAIN BOARD

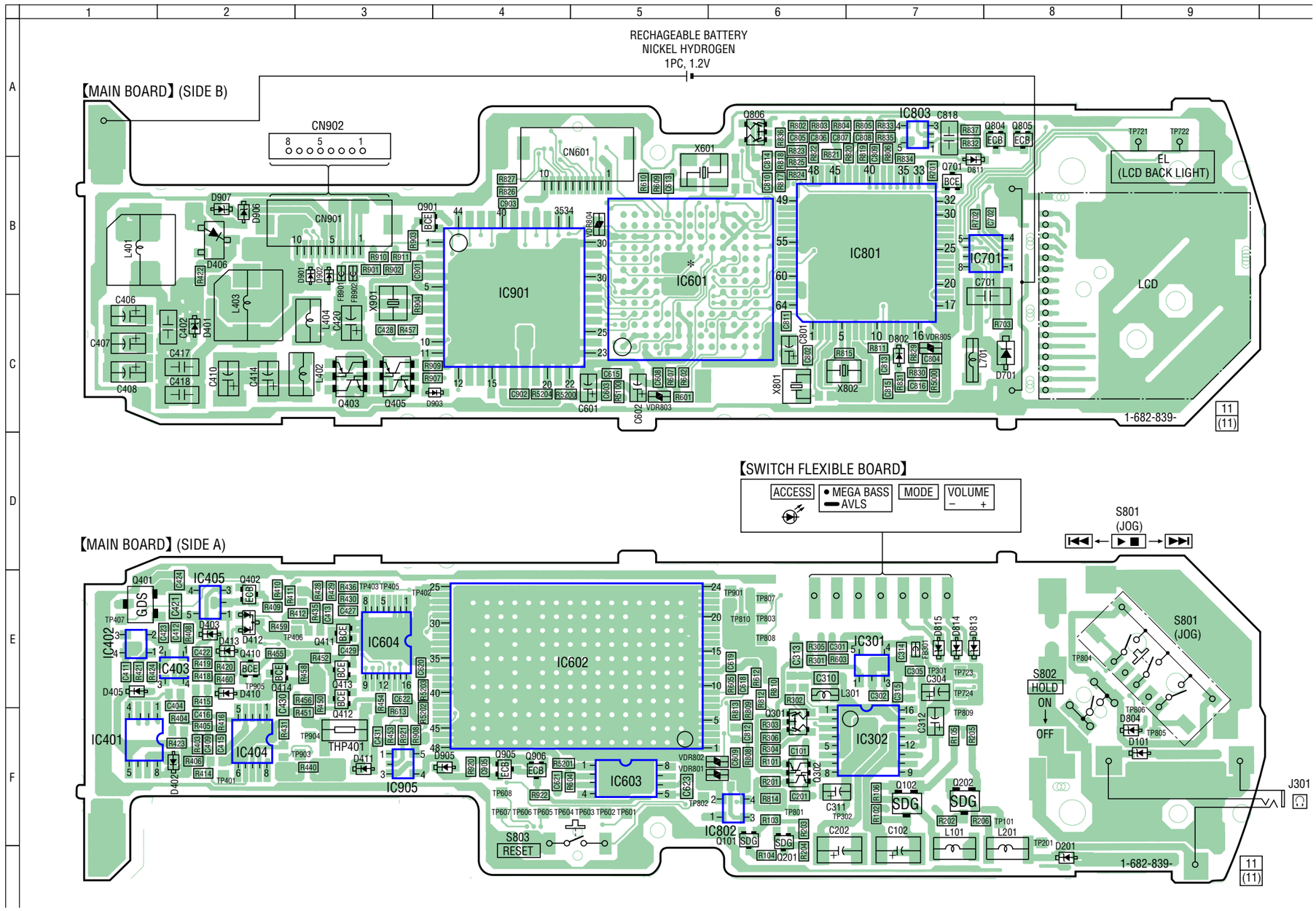


SECTION 4
DIAGRAMS

4-1. BLOCK DIAGRAMS



4-2. PRINTED WIRING BOARDS – MAIN SECTION – : Uses unleaded solder.



• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D101	F-9	IC604	E-3
D201	F-8	IC701	B-7
D401	C-2	IC801	B-7
D402	F-2	IC802	F-6
D403	E-2	IC803	A-7
D405	E-1	IC901	B-4
D406	B-2	IC905	F-3
D410	E-2		
D411	F-3		
D412	E-2	Q101	F-6
		Q102	F-7
D413	E-2	Q201	F-6
D701	C-8	Q202	F-7
D802	C-7	Q301	F-6
D804	F-9		
D811	B-7	Q302	F-6
		Q401	E-1
D813	E-7	Q402	E-2
D814	E-7	Q403	C-3
D815	E-7	Q405	C-3
D901	B-3		
D902	B-3	Q410	E-2
		Q411	E-3
D903	C-3	Q412	E-3
D905	F-4	Q413	E-3
D906	B-2	Q414	E-2
D907	B-2		
		Q701	B-7
		Q804	A-8
IC301	E-7	Q805	A-8
IC302	F-7	Q806	A-6
IC401	F-1	Q901	B-3
IC402	E-1		
IC403	E-2	Q905	F-4
		Q906	F-4
IC404	F-2		
IC405	E-2		
IC601	B-5	VDR801	F-6
IC602	E-4	VDR802	F-6
IC603	F-5	VDR803	C-5
		VDR804	B-5
		VDR805	C-7

Note:

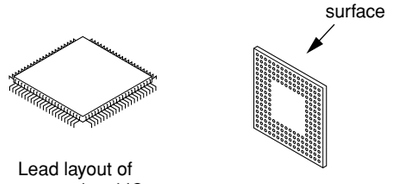
- ○—— : parts extracted from the component side.
- ▬ : Pattern from the side which enables seeing.
(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Side B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A)	Parts on the parts face side seen from the parts face are indicated.

- Main board is six-layer printed board.
However, the patterns of layers 2 to 5 have not been included in this diagrams.

* Replacement of IC601 used in the set requires a special tool.

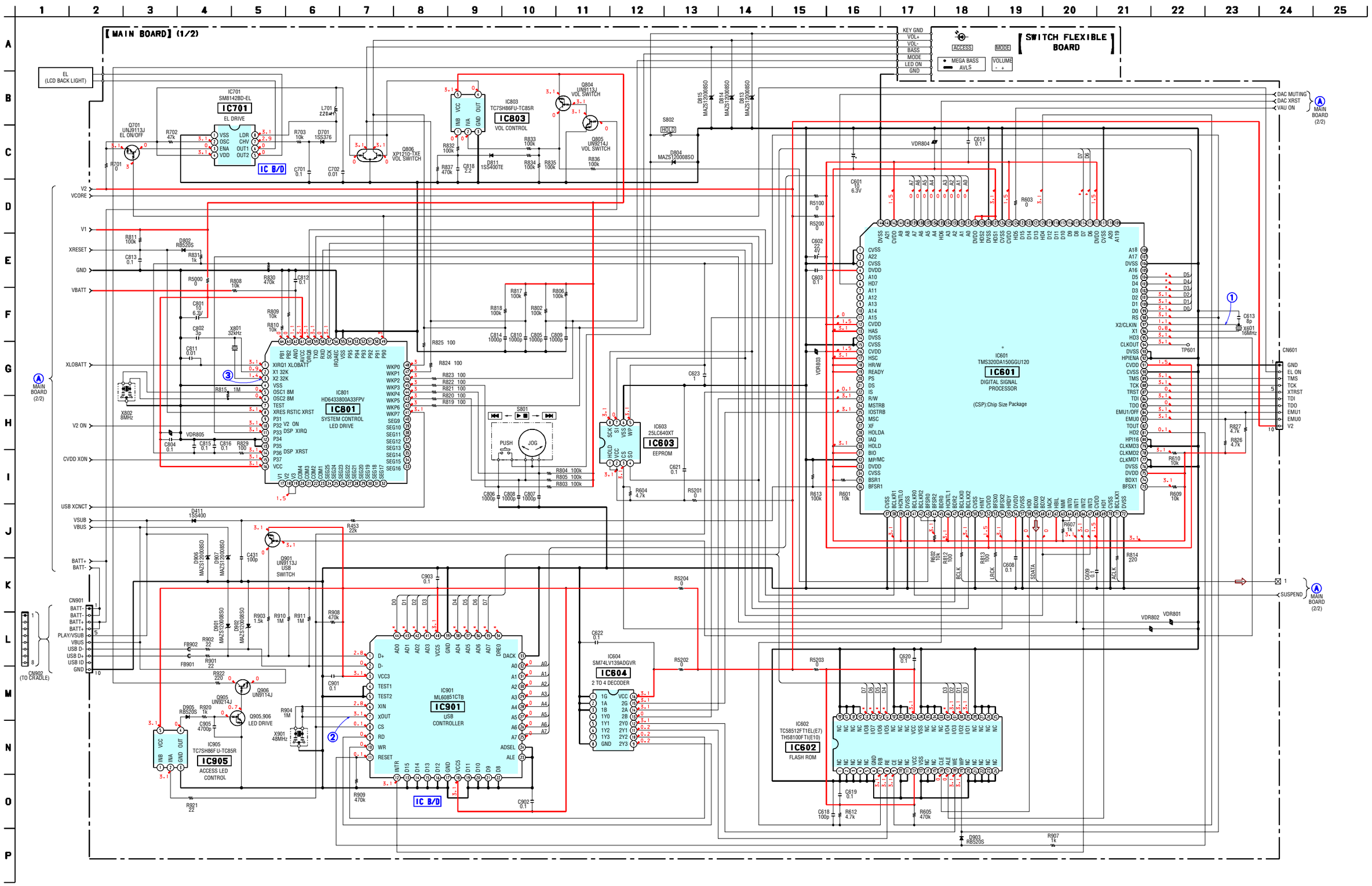
- Lead Layouts



Lead layout of conventional IC

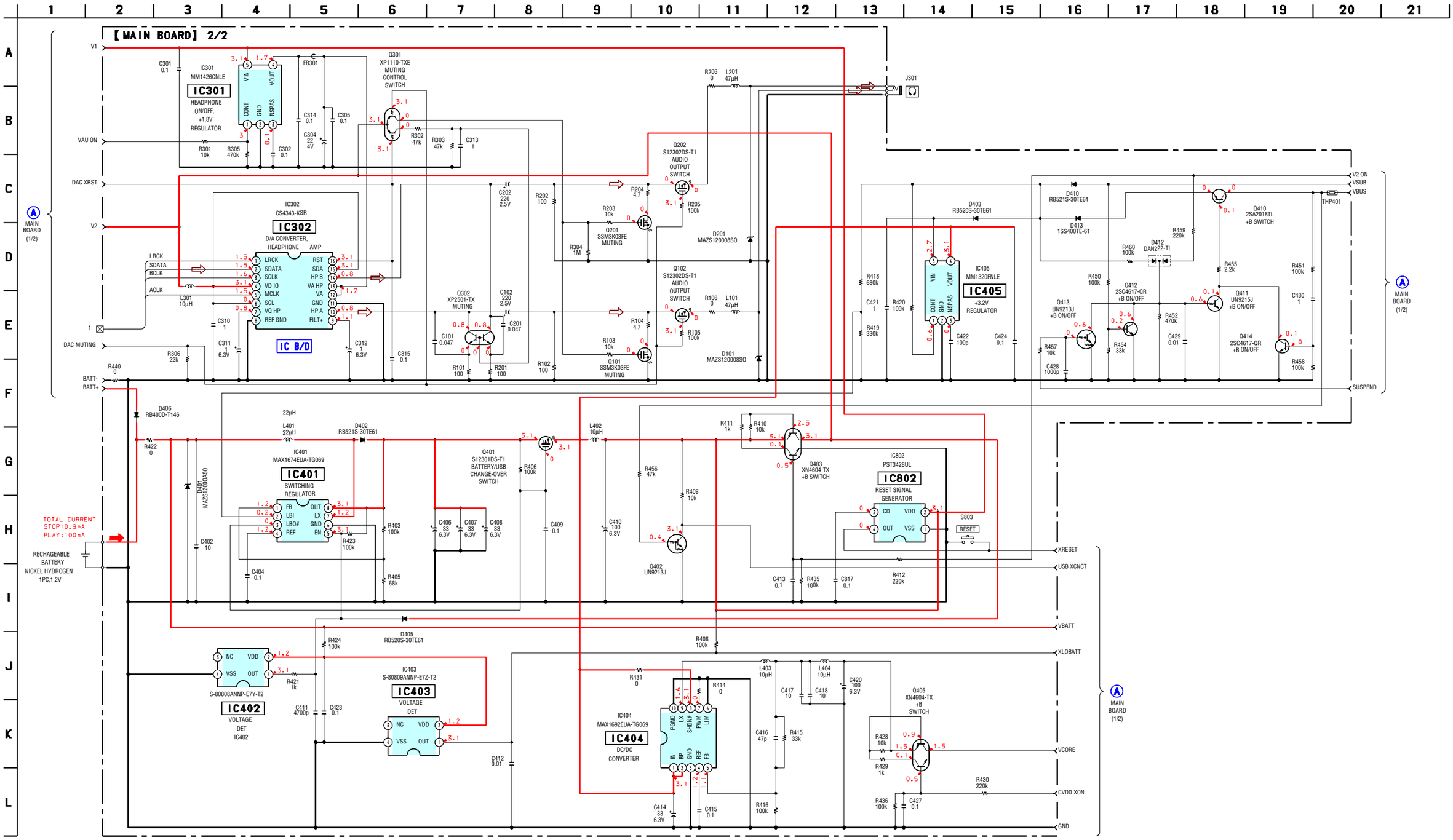
CSP (chip size package)

4-3. SCHEMATIC DIAGRAM – MAIN SECTION (1/2) – ● See page 11 for Notes. ● See page 11 for IC Block Diagrams. ● See page 11 for Waveforms.



4-4. SCHEMATIC DIAGRAM – MAIN SECTION (2/2) –

● See page 11 for Notes. ● See page 11 for IC Block Diagrams. ● See page 11 for Waveforms.



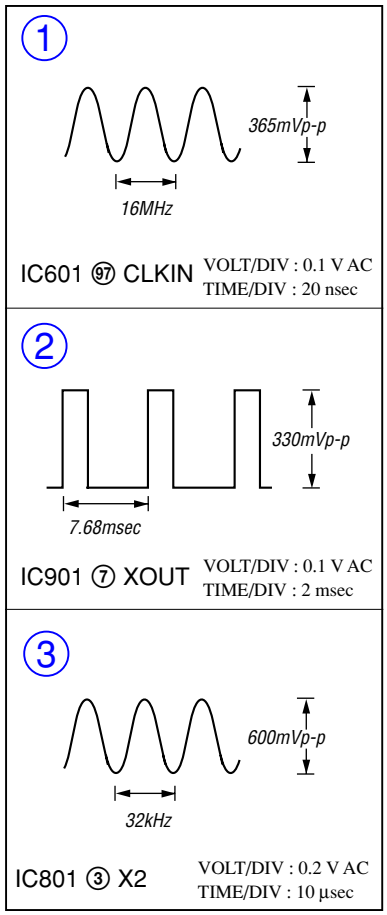
Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▬ : B+ Line.
- Power voltage is dc 1.5 V and fed with regulated dc power supply from battery terminal.
- Voltages and waveforms are dc with respect to ground in playback mode.
  no mark : PLAY
  * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : DIGITAL
  ⇨ : ANALOG

* Replacement of IC601 used in the set requires a special tool.

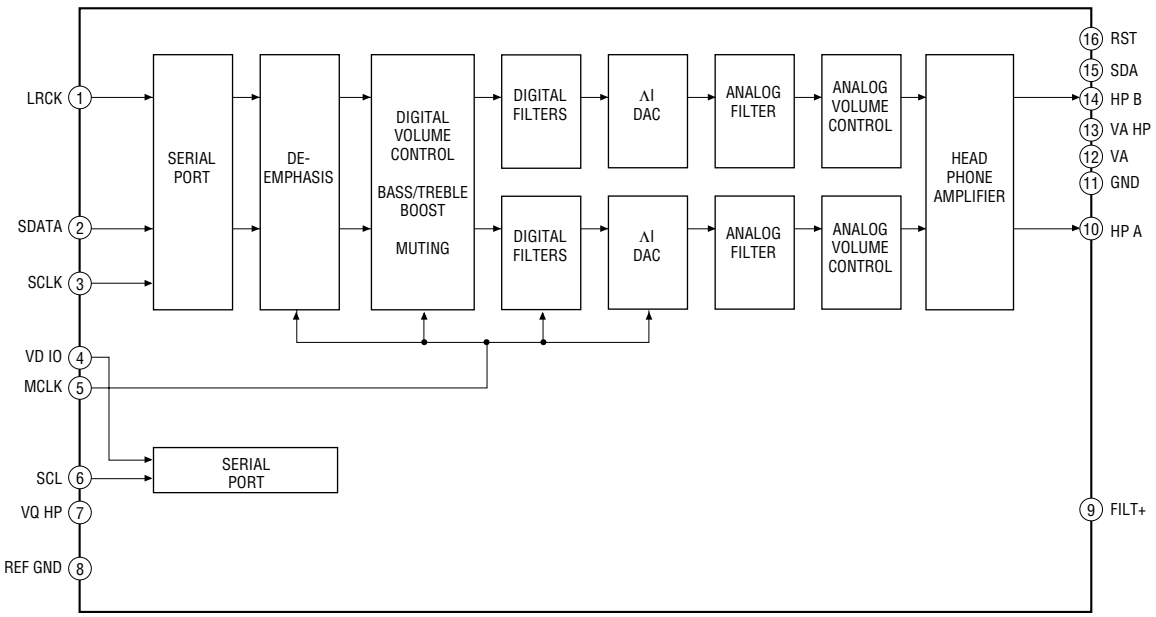
- The voltage and waveform of CSP (chip size package) cannot be measured, because its lead layout is different form that of conventional IC.

● Waveforms

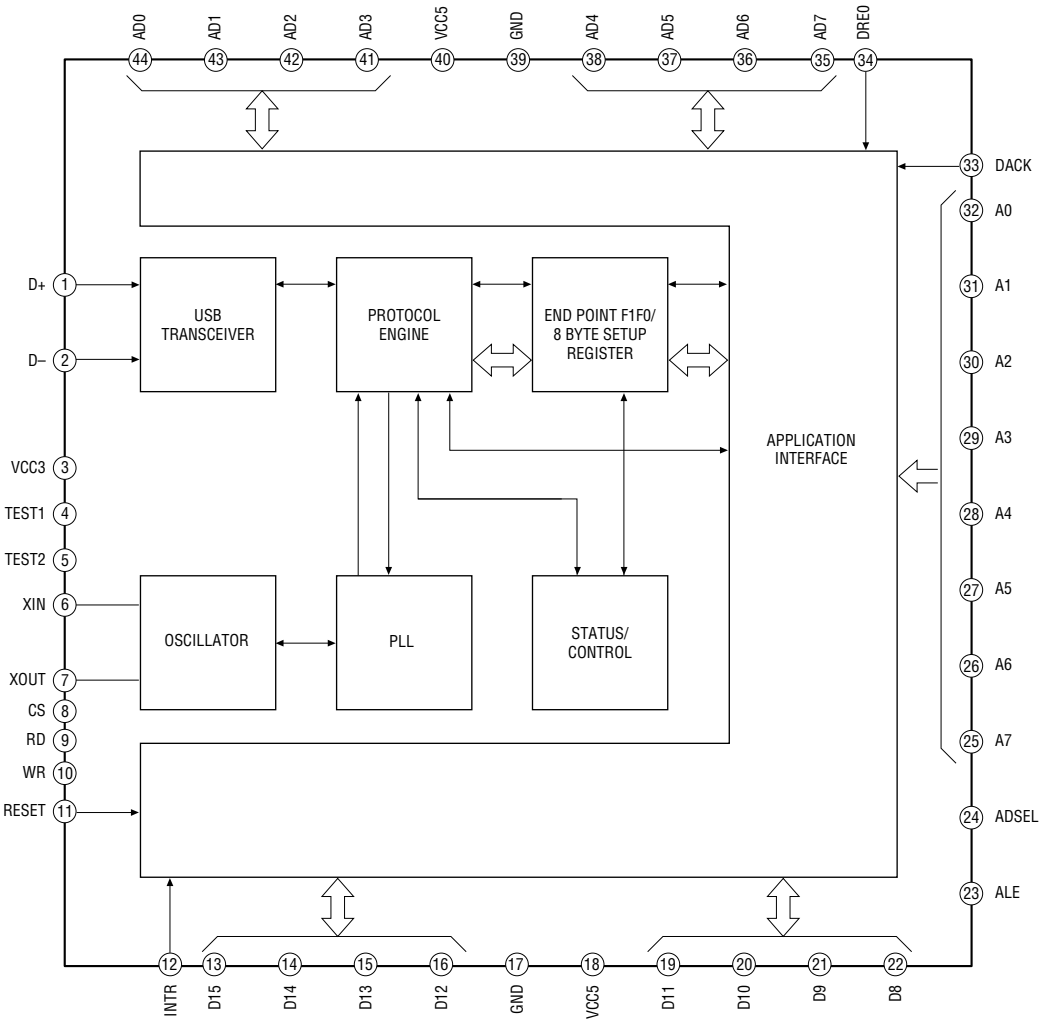


• IC Block Diagrams

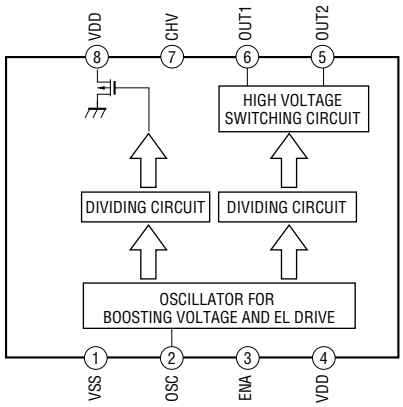
IC302 CS4343-KSR



IC901 ML60851CTB



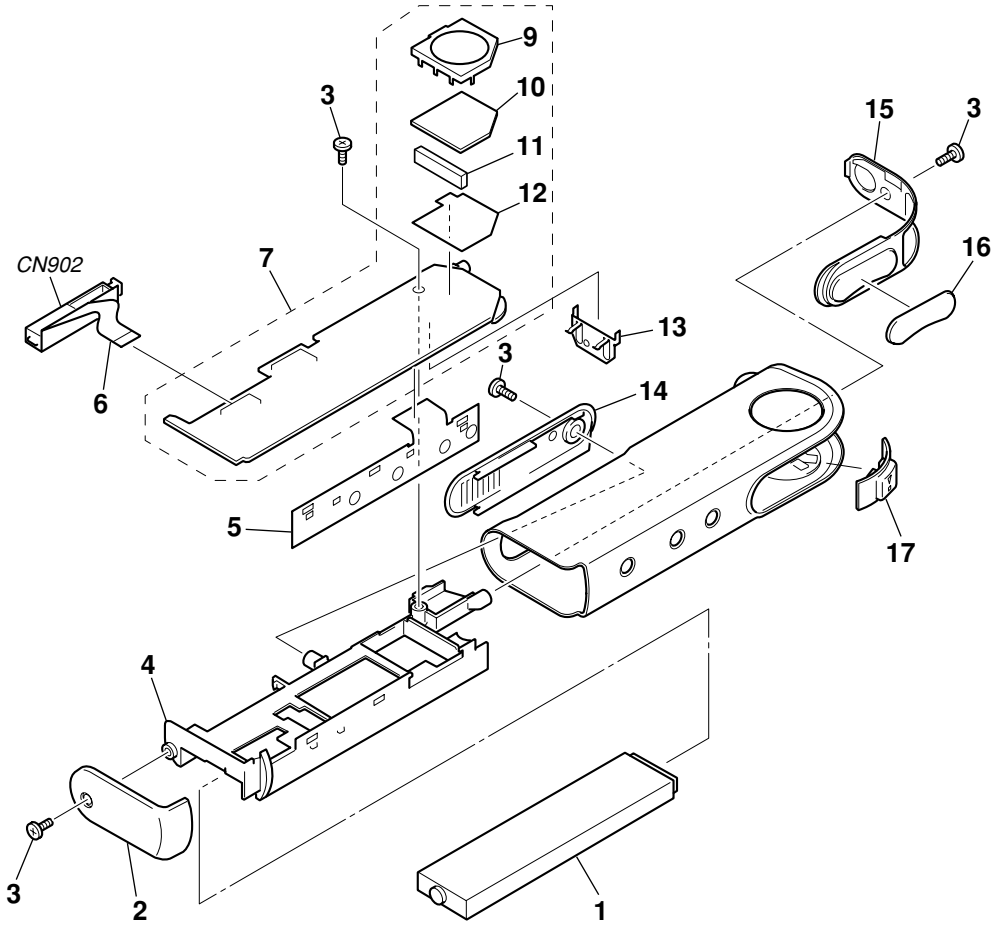
IC701 SM8142BD-EL



SECTION 5
EXPLODED VIEWS

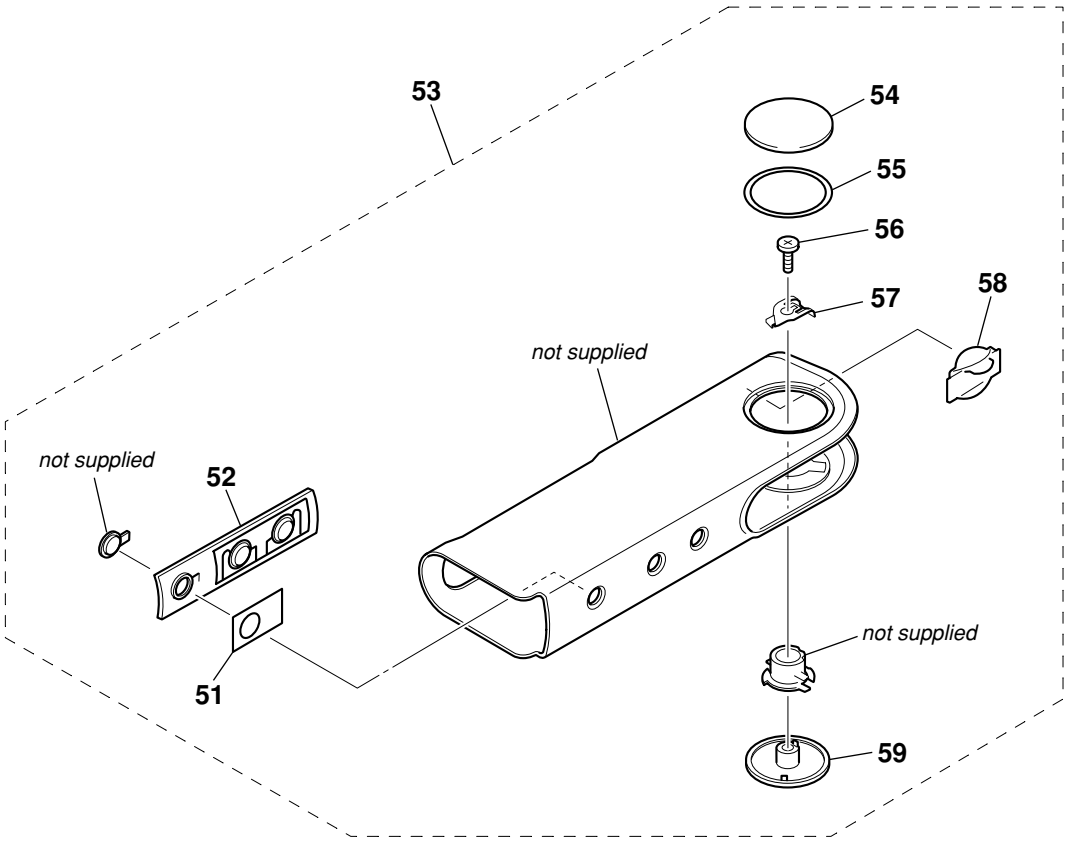
NOTE :
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Color indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ••• (RED)
  ↑ ↑
  Parts color Cabinet's color
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories are given in the last of this parts list.
- Abbreviation
  FR : French
  HK : Hong Kong

5-1. MAIN SECTION



Ref. No.	Part No.	Description	Remark
1	1-756-226-11	BATTERY, NICKEL HYDROGEN	
2	X-3381-471-1	CASE ASSY, LID...(SILVER) (E7)	
2	X-3381-473-1	CASE ASSY, LID...(TITAN) (E10)	
3	3-343-254-71	SCREW B1.7x3.5	
4	3-233-044-01	FRAME	
5	1-682-840-11	SWITCH FLEXIBLE BOARD	
6	1-682-841-11	CONNECTOR FLEXIBLE BOARD	
7	X-3381-675-1	MAIN BOARD SUB ASSY (E7)	
7	X-3381-677-1	MAIN BOARD SUB ASSY (E10)	
* 9	3-232-732-01	HOLDER, LCD	
* 10	1-804-470-11	DISPLAY PANEL,LIQUID CRYSTAL (E7)	
* 10	1-804-559-11	DISPLAY PANEL,LIQUID CRYSTAL (E10)	
* 11	1-694-832-11	CONDUCTIVE BOARD, CONNECTION	
* 12	1-804-469-11	ELEMENT, EL	
13	3-233-050-01	TERMINAL BOARD (–), BATTERY	
14	3-233-045-01	PROTECTOR	
15	3-233-055-01	PLATE, CONTROL ORNAMENTAL	
16	3-233-057-01	BUTTON (VOL)	
17	3-236-763-01	KEY TOP	
CN902	1-815-741-11	CONNECTOR	

5-2. CASE SECTION



Ref. No.	Part No.	Description	Remark
* 51	3-234-481-01	SHEET (MODE), ADHESIVE	
* 52	3-233-060-01	BUTTON (MODE)	
53	X-3381-676-1	CASE, SUB ASSY (E7)	
53	X-3381-678-1	CASE, SUB ASSY (E10)	
* 54	3-233-047-01	WINDOW (LCD)	
55	3-233-056-01	SHEET (WINDOW), ADHESIVE	
56	3-343-254-71	SCREW B1.7x3.5	
* 57	3-233-054-01	ARM (HOLD)	
* 58	3-233-058-01	SHAFT (HAND STRAP)	
* 59	3-233-052-01	KNOB (HOLD)	

SECTION 6
ELECTRICAL PARTS LIST

NOTE :

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE :Metal oxide-film resistor
  F : nonflammable
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ , for example :
  uA.... : µ A.... , uPA.... : µ PA....
  uPB.... : µ PB.... , uPC.... : µ PC....
  uPD.... : µ PD....
- CAPACITORS
  uF : µ F
- COILS
  uH : µ H
- Abbreviation
  FR : French
  HK : Hong Kong

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
	X-3381-675-1	MAIN BOARD SUB ASSY (E7)			
	X-3381-677-1	MAIN BOARD SUB ASSY (E10)			
		**********			
*	1-694-832-11	CONDUCTIVE BOARD, CONNECTION			
*	1-804-469-11	ELEMENT, EL			
*	1-804-470-11	DISPLAY PANEL,LIQUID CRYSTAL (E7)			
*	1-804-559-11	DISPLAY PANEL,LIQUID CRYSTAL (E10)			
*	3-232-732-01	HOLDER, LCD			
	3-233-050-01	TERMINAL BOARD (–), BATTERY			
		<CAPACITOR>			
C101	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C102	1-135-868-91	TANTAL. CHIP	220uF	20%	2.5V
C201	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C202	1-135-868-91	TANTAL. CHIP	220uF	20%	2.5V
C301	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C302	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C304	1-127-895-11	TANTAL. CHIP	22uF	20%	4V
C305	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C310	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C311	1-135-337-11	TANTAL. CHIP	1uF	20%	6.3V
C312	1-135-337-11	TANTAL. CHIP	1uF	20%	6.3V
C313	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C314	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C315	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C402	1-127-692-11	CERAMIC CHIP	10uF	10%	6.3V
C404	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C406	1-137-763-21	TANTAL. CHIP	33uF	20%	6.3V
C407	1-137-763-21	TANTAL. CHIP	33uF	20%	6.3V
C408	1-137-763-21	TANTAL. CHIP	33uF	20%	6.3V
C409	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C410	1-128-964-11	TANTAL. CHIP	100uF	20%	6.3V
C411	1-164-941-11	CERAMIC CHIP	0.0047uF	10%	16V
C412	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C413	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C414	1-137-763-21	TANTAL. CHIP	33uF	20%	6.3V
C415	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C416	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C417	1-127-692-11	CERAMIC CHIP	10uF	10%	6.3V
C418	1-127-692-11	CERAMIC CHIP	10uF	10%	6.3V
C420	1-128-964-11	TANTAL. CHIP	100uF	20%	6.3V
C421	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V

Ref. No.	Part No.	Description			Remark
C422	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C423	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C424	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C427	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C428	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C429	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C430	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C431	1-164-931-11	CERAMIC CHIP	100PF	10%	50V
C601	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C602	1-127-895-11	TANTAL. CHIP	22uF	20%	4V
C603	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C608	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C609	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C613	1-164-848-11	CERAMIC CHIP	8PF	0.50PF	50V
C615	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C618	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C619	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C620	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C621	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C622	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C623	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C701	1-104-503-12	CERAMIC CHIP	0.1uF	10%	100V
C702	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C801	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C802	1-164-843-11	CERAMIC CHIP	3PF	0.25PF	50V
C804	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C805	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C806	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C807	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C808	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C809	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C810	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C811	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C812	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C813	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C814	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C815	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C816	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C818	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C901	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C902	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C903	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C905	1-164-941-11	CERAMIC CHIP	0.0047uF	10%	16V

MAIN

Ref. No.	Part No.	Description	Remark
		<CONNECTOR>	
CN601	1-794-743-21	CONNECTOR, FFC(LIF(NON-ZIF))	
CN901	1-815-777-21	CONNECTOR, FPC(ZIF) 10P	
		<DIODE>	
D101	8-719-056-59	DIODE MAZS120008SO	
D201	8-719-056-59	DIODE MAZS120008SO	
D401	8-719-056-59	DIODE MAZS120008SO	
D402	8-719-071-34	DIODE RB521S-30-TE61	
D403	8-719-069-29	DIODE RB520S-30-TE61	
D405	8-719-069-29	DIODE RB520S-30-TE61	
D406	8-719-988-07	DIODE RB400D	
D410	8-719-071-34	DIODE RB521S-30-TE61	
D411	8-719-069-28	DIODE 1SS400TE-61	
D412	8-719-989-03	DIODE DNA222	
D413	8-719-069-28	DIODE 1SS400TE-61	
D701	8-719-052-12	DIODE 1SS376TE-17	
D802	8-719-069-29	DIODE RB520S-30TE61	
D804	8-719-056-59	DIODE MAZS120008SO	
D811	8-719-069-28	DIODE 1SS400TE-61	
D813	8-719-056-59	DIODE MAZS120008SO	
D814	8-719-056-59	DIODE MAZS120008SO	
D815	8-719-056-59	DIODE MAZS120008SO	
D901	8-719-056-59	DIODE MAZS120008SO	
D902	8-719-056-59	DIODE MAZS120008SO8SO	
D903	8-719-069-29	DIODE RB520S-30TE61	
D905	8-719-069-29	DIODE RB520S-30TE61	
D906	8-719-056-59	DIODE MAZS120008SO	
D907	8-719-056-59	DIODE MAZS120008SO	
		<FERRITE BEAD>	
* FB301	1-469-229-22	FERRITE 0uH	
FB901	1-234-576-21	FILTER, CHIP EMI	
FB902	1-234-576-21	FILTER, CHIP EMI	
		<IC>	
IC301	8-759-656-53	IC MM1426CNLE	
IC302	8-759-656-51	IC CS4343-KSR	
IC401	8-759-656-52	IC MAX1674EUA-TG069	
IC402	8-759-572-21	IC S-80808ANNP-E7Y-T2	
IC403	8-759-530-11	IC S-80809ANNP-E7Z-T2	
IC404	8-759-713-51	IC MAX1692EUB-TG069	
IC405	8-759-676-78	IC MM1320FNLE	
IC602	6-701-115-01	IC TH58100FTI (E10)	
IC602	6-700-547-01	IC TC58512FTI(EL) (E7)	
IC604	8-759-713-60	IC SN74LV139ADGVR	
IC701	8-759-830-70	IC SM8142BD-EL	
IC801	6-700-945-01	IC HD6433800A33FP	
IC802	8-759-659-13	IC PST3428UL	
IC803	8-759-392-01	IC TC7SH86FU-TE85R	
IC901	8-759-646-59	IC ML60851CTB	
IC905	8-759-592-44	IC TC7SZ04FU(TE85R)	
		<JACK>	
J301	1-794-761-41	JACK (🎧)	

Ref. No.	Part No.	Description	Remark
		<INDUCTOR>	
L101	1-469-424-21	INDUCTOR 47uH	
L201	1-469-424-21	INDUCTOR 47uH	
L301	1-414-373-31	INDUCTOR 10uH	
L401	1-424-872-21	INDUCTOR 22uH	
L402	1-414-398-11	INDUCTOR 10uH	
L403	1-419-627-21	INDUCTOR 10uH	
L404	1-414-398-11	INDUCTOR 10uH	
L701	1-414-406-41	INDUCTOR 220uH	
		<TRANSISTOR>	
Q101	8-729-047-68	TRANSISTOR SSM3K03FE(TPL3)	
Q102	8-729-046-45	TRANSISTOR SI2302DS-T1	
Q201	8-729-047-68	TRANSISTOR SSM3K03FE(TPL3)	
Q202	8-729-046-45	TRANSISTOR SI2302DS-T1	
Q301	8-729-426-06	TRANSISTOR XP1110-TXE	
Q302	8-729-012-78	TRANSISTOR XP251	
Q401	8-729-046-75	TRANSISTOR SI2301DS-T1	
Q402	8-729-037-74	TRANSISTOR UN9213J-(TX).SO	
Q403	8-729-425-25	TRANSISTOR XN4604-TX	
Q405	8-729-425-25	TRANSISTOR XN4604-TX	
Q410	8-729-051-23	TRANSISTOR 2SA2018TL	
Q411	8-729-037-76	TRANSISTOR UN9215J-(TX).SO	
Q412	8-729-928-05	TRANSISTOR 2SC4617TL-QR	
Q413	8-729-037-74	TRANSISTOR UN9213J-(TX).SO	
Q414	8-729-927-99	TRANSISTOR 2SC4617R	
Q701	8-729-037-61	TRANSISTOR UN9113J-(TX).SO	
Q804	8-729-037-61	TRANSISTOR UN9113J-(TX).SO	
Q805	8-729-042-72	TRANSISTOR UN9214J-(K8).SO	
Q806	8-729-426-51	TRANSISTOR XP1210-TXE	
Q901	8-729-037-61	TRANSISTOR UN9113J-(TX).SO	
Q905	8-729-042-72	TRANSISTOR UN9214J-(K8).SO	
Q906	8-729-042-60	TRANSISTOR UN9114J-(K8).SO	
		<RESISTOR>	
R101	1-218-941-11	RES-CHIP 100 5% 1/16W	
R102	1-218-941-11	RES-CHIP 100 5% 1/16W	
R103	1-218-965-11	RES-CHIP 10K 5% 1/16W	
R104	1-220-803-81	RES-CHIP 4.7 5% 1/16W	
R105	1-218-977-11	RES-CHIP 100K 5% 1/16W	
R106	1-218-990-11	SHORT 0	
R201	1-218-941-11	RES-CHIP 100 5% 1/16W	
R202	1-218-941-11	RES-CHIP 100 5% 1/16W	
R203	1-218-965-11	RES-CHIP 10K 5% 1/16W	
R204	1-220-803-81	RES-CHIP 4.7 5% 1/16W	
R205	1-218-977-11	RES-CHIP 100K 5% 1/16W	
R206	1-218-990-11	SHORT 0	
R301	1-218-965-11	RES-CHIP 10K 5% 1/16W	
R302	1-218-973-11	RES-CHIP 47K 5% 1/16W	
R303	1-218-973-11	RES-CHIP 47K 5% 1/16W	
R304	1-218-989-11	RES-CHIP 1M 5% 1/16W	
R305	1-218-985-11	RES-CHIP 470K 5% 1/16W	
R306	1-218-969-11	RES-CHIP 22K 5% 1/16W	
R403	1-208-935-11	METAL CHIP 100K 0.50% 1/16W	
R405	1-208-931-11	METAL CHIP 68K 0.50% 1/16W	
R406	1-218-977-11	RES-CHIP 100K 5% 1/16W	
R408	1-218-977-11	RES-CHIP 100K 5% 1/16W	

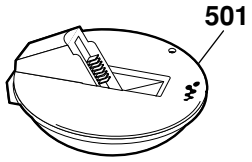
IC601, IC603: not supplied.
Replace main board sub ASSY when repair.

Ref. No.	Part No.	Description			Remark
R409	1-218-965-11	RES-CHIP	10K	5%	1/16W
R410	1-218-965-11	RES-CHIP	10K	5%	1/16W
R411	1-218-953-11	RES-CHIP	1K	5%	1/16W
R412	1-218-981-11	RES-CHIP	220K	5%	1/16W
R414	1-218-990-11	SHORT	0		
R415	1-208-719-11	METAL CHIP	33K	0.50%	1/16W
R416	1-208-935-11	METAL CHIP	100K	0.50%	1/16W
R418	1-208-955-11	METAL CHIP	680K	0.50%	1/16W
R419	1-208-947-11	METAL CHIP	330K	0.50%	1/16W
R420	1-218-977-11	RES-CHIP	100K	5%	1/16W
R421	1-218-953-11	RES-CHIP	1K	5%	1/16W
R422	1-218-990-11	SHORT	0		
R423	1-218-977-11	RES-CHIP	100K	5%	1/16W
R424	1-218-977-11	RES-CHIP	100K	5%	1/16W
R428	1-218-965-11	RES-CHIP	10K	5%	1/16W
R429	1-218-953-11	RES-CHIP	1K	5%	1/16W
R430	1-218-981-11	RES-CHIP	220K	5%	1/16W
R431	1-218-990-11	SHORT	0		
R435	1-218-977-11	RES-CHIP	100K	5%	1/16W
R436	1-218-977-11	RES-CHIP	100K	5%	1/16W
R440	1-218-990-11	SHORT	0		
R450	1-218-977-11	RES-CHIP	100K	5%	1/16W
R451	1-218-977-11	RES-CHIP	100K	5%	1/16W
R452	1-218-985-11	RES-CHIP	470K	5%	1/16W
R453	1-218-969-11	RES-CHIP	22K	5%	1/16W
R454	1-218-971-11	RES-CHIP	33K	5%	1/16W
R455	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R456	1-218-973-11	RES-CHIP	47K	5%	1/16W
R457	1-218-965-11	RES-CHIP	10K	5%	1/16W
R458	1-218-977-11	RES-CHIP	100K	5%	1/16W
R459	1-218-981-11	RES-CHIP	220K	5%	1/16W
R460	1-218-977-11	RES-CHIP	100K	5%	1/16W
R601	1-218-965-11	RES-CHIP	10K	5%	1/16W
R602	1-218-965-11	RES-CHIP	10K	5%	1/16W
R603	1-218-990-11	SHORT	0		
R604	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R605	1-218-985-11	RES-CHIP	470K	5%	1/16W
R607	1-218-953-11	RES-CHIP	1K	5%	1/16W
R609	1-218-965-11	RES-CHIP	10K	5%	1/16W
R610	1-218-965-11	RES-CHIP	10K	5%	1/16W
R612	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R613	1-218-977-11	RES-CHIP	100K	5%	1/16W
R701	1-218-990-11	SHORT	0		
R702	1-218-973-11	RES-CHIP	47K	5%	1/16W
R703	1-218-965-11	RES-CHIP	10K	5%	1/16W
R802	1-218-977-11	RES-CHIP	100K	5%	1/16W
R803	1-218-977-11	RES-CHIP	100K	5%	1/16W
R804	1-218-977-11	RES-CHIP	100K	5%	1/16W
R805	1-218-977-11	RES-CHIP	100K	5%	1/16W
R806	1-218-977-11	RES-CHIP	100K	5%	1/16W
R808	1-218-965-11	RES-CHIP	10K	5%	1/16W
R809	1-218-965-11	RES-CHIP	10K	5%	1/16W
R810	1-218-965-11	RES-CHIP	10K	5%	1/16W
R811	1-218-977-11	RES-CHIP	100K	5%	1/16W
R812	1-218-941-11	RES-CHIP	100	5%	1/16W
R813	1-218-941-11	RES-CHIP	100	5%	1/16W
R814	1-218-945-11	RES-CHIP	220	5%	1/16W
R815	1-218-989-11	RES-CHIP	1M	5%	1/16W
R817	1-218-977-11	RES-CHIP	100K	5%	1/16W
R818	1-218-977-11	RES-CHIP	100K	5%	1/16W
R819	1-218-941-11	RES-CHIP	100	5%	1/16W
R820	1-218-941-11	RES-CHIP	100	5%	1/16W
R821	1-218-941-11	RES-CHIP	100	5%	1/16W
R822	1-218-941-11	RES-CHIP	100	5%	1/16W
R823	1-218-941-11	RES-CHIP	100	5%	1/16W
R824	1-218-941-11	RES-CHIP	100	5%	1/16W
R825	1-218-941-11	RES-CHIP	100	5%	1/16W
R826	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R827	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R829	1-218-941-11	RES-CHIP	100	5%	1/16W
R830	1-218-985-11	RES-CHIP	470K	5%	1/16W
R831	1-218-953-11	RES-CHIP	1K	5%	1/16W
R832	1-218-977-11	RES-CHIP	100K	5%	1/16W
R833	1-218-977-11	RES-CHIP	100K	5%	1/16W
R834	1-218-977-11	RES-CHIP	100K	5%	1/16W
R835	1-218-977-11	RES-CHIP	100K	5%	1/16W
R836	1-218-977-11	RES-CHIP	100K	5%	1/16W
R837	1-218-985-11	RES-CHIP	470K	5%	1/16W
R901	1-208-643-11	RES-CHIP	22	5%	1/16W
R902	1-208-643-11	RES-CHIP	22	5%	1/16W
R903	1-218-955-11	RES-CHIP	1.5K	5%	1/16W
R904	1-218-989-11	RES-CHIP	1M	5%	1/16W
R907	1-218-953-11	RES-CHIP	1K	5%	1/16W
R908	1-218-985-11	RES-CHIP	470K	5%	1/16W
R909	1-218-985-11	RES-CHIP	470K	5%	1/16W
R910	1-218-989-11	RES-CHIP	1M	5%	1/16W
R911	1-218-989-11	RES-CHIP	1M	5%	1/16W
R920	1-218-953-11	RES-CHIP	1K	5%	1/16W
R921	1-208-643-11	RES-CHIP	22	5%	1/16W
R922	1-218-945-11	RES-CHIP	220	5%	1/16W
R5000	1-218-990-11	SHORT	0		
R5100	1-218-990-11	SHORT	0		
R5200	1-218-990-11	SHORT	0		
R5201	1-218-990-11	SHORT	0		
R5202	1-218-990-11	SHORT	0		
R5203	1-218-990-11	SHORT	0		
R5204	1-218-990-11	SHORT	0		
		<SWITCH>			
S801	1-786-221-21	SWITCH, LEVER (JOG)			
S802	1-786-068-21	SWITCH, PUSH (HOLD)			
S803	1-786-227-21	SWITCH, TACTILE (RESET)			
		<THERMISTOR>			
THP401	1-803-870-21	THERMISTOR, POSITIVE			
		<VARISTOR>			
VDR801	1-803-742-21	VARISTOR, CHIP			
VDR802	1-803-742-21	VARISTOR, CHIP			
VDR803	1-803-742-21	VARISTOR, CHIP			
VDR804	1-803-742-21	VARISTOR, CHIP			
VDR805	1-803-742-21	VARISTOR, CHIP			
		<VIBLATOR>			
X601	1-781-746-21	VIBRATOR, CRYSTAL (16MHz)			
X801	1-767-994-23	VIBRATOR, CRYSTAL (32kHz)			

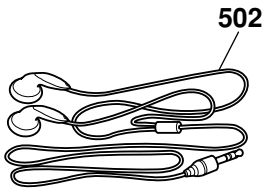
Ref. No.	Part No.	Description	Remark
X802	1-795-313-21	VIBRATOR, CERAM (8MHz)	
X901	1-781-620-21	VIBRATOR, CERAM (48MHz)	
**********			
		MISCELLANEOUS	
		**********	
1	1-756-226-11	BATTERY, NICKEL HYDROGEN	
5	1-682-840-11	SWITCH FLEXIBLE BOARD	
6	1-682-841-11	CONNECTOR FLEXIBLE BOARD	
* 10	1-804-470-11	DISPLAY PANEL,LIQUID CRYSTAL (E7)	
* 10	1-804-559-11	DISPLAY PANEL,LIQUID CRYSTAL (E10)	
* 11	1-694-832-11	CONDUCTIVE BOARD, CONNECTION	
* 12	1-804-469-11	ELEMENT, EL	
CN902	1-815-741-11	CONNECTOR	
**********			

		ACCESSORIES	
		**********	
⚠	1-418-261-12	ADAPTOR, AC (AC-E455F) (FR,E33)	
⚠	1-473-115-11	ADAPTOR, AC (AC-E455F) (UK,HK)	
501	1-476-905-11	CRADLE UNIT(NWA-UC7)	
503	1-757-412-31	USB CABLE	
	3-042-515-11	POUCH, CARRYING	
	3-232-733-11	MANUAL, INSTRUCTION (ENGLISH)	
	3-232-733-21	MANUAL, INSTRUCTION (FRENCH) (FR)	
	3-232-733-31	MANUAL, INSTRUCTION (GERMAN) (FR)	
	3-232-733-41	MANUAL, INSTRUCTION (TRADITIONAL CHINESE) (E33,HK)	
	3-237-113-21	APPLICATION SOFT (CD-ROM) (UK,FR)	
	3-237-113-31	APPLICATION SOFT (CD-ROM) (E33,HK)	
	3-238-614-01	INSTRUCTION (ENGLISH,FRENCH,GERMAN) (FR,UK)	
502	8-953-253-91	RECEIVER, EAR MDR-E838LPSK	

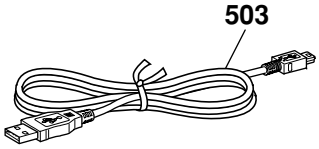
• Cradle unit (1)



• Earphones (1)



• USB cable (1)



Note: The component name in a figure just mentions a component name in instruction manual.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2001.10	New